

Sympatry of Common Cranes *Grus grus* with larger cranes in the last c. 125,000 years

by *E. Marjorie Northcote*

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Common Cranes *Grus grus* do not frequent Malta (Cramp & Simmons 1980), but they did so in the last Interglacial (c. 125,000 years ago) (Northcote 1982a). I have prepared the proximal part of a tarsometatarsus and the distal part of a tibiotarsus of *Grus grus* from a deposit, which is of that age, from Mnaidra, Malta (University Museum of Cambridge, No. 252a). I also found there remains of the extinct Maltese Crane *G. melitensis*, which was the size of the present largest living crane, the Sarus Crane *G. antigone* (Northcote 1982b). The Common Crane weighs c.6kg (Cramp & Simmons 1980); the Sarus Crane weighs c.8kg (Jerdon 1877). The Common Crane and the Maltese Crane were evidently sympatric. Subsequently also, in the Glacial, the Neolithic and the Iron Age a Sarus-sized crane was sympatric with the Common Crane elsewhere in Europe (Table 1). In each case the larger crane became extinct, whereas its smaller congener survived.

TABLE I
Sympatry of Common Crane *Grus grus* with larger cranes in the Glacial, Neolithic and Iron Age

GLACIAL	NEOLITHIC	IRON AGE	
S.W. France (Dordogne)	W. Germany (Ulm)	Scotland (Strathclyde)	England (Somerset)
Common Crane (Mourer-Chauviré 1975); larger crane (Mourer- Chauviré <i>et al.</i> 1975)	Common Crane and larger crane (Soergel 1955)	Common Crane (Ritchie 1970-71); larger crane (Harrison & Cowles 1977)	Common Crane (Andrews 1899, Gray 1966); larger crane (Harrison & Cowles 1977)

Note. The larger crane has been attributed either to *G. primigenia* Milne-Edwards or to the Sarus Crane *G. antigone* or to both.

Large birds that migrate long distances evolve adaptations such as elaborate soaring techniques (Pennycuik *et al.* 1979). Big birds that do not evolve such adaptations have a more restricted flying range and as a consequence may develop specialisations for exploiting their immediate environment, thus making them vulnerable to rapid local environmental changes. Migratory birds are less vulnerable to such changes.

At the end of the Interglacial there was a climatic change which was quite rapid (Starkel 1977) and the abundant food resources on Malta (Northcote 1982a) would have become depleted. Common Cranes have rather catholic feeding habits and have evolved adaptations for migrating long distances in search of food and breeding grounds whereby, probably, they survived the change. On the other hand, Maltese Cranes seem to have been more specialised (Northcote 1982b) and, having probably not evolved migratory habits, were unable to adapt and became extinct. There may be a similar explanation for why, later on in Europe, the Common Crane survived in preference to its larger sympatric congener.

In northern India, the Sarus Crane is sympatric with the Common Crane, the former being an accomplished flier, but habitually non-migratory (Walkinshaw 1973). Though, at present, both species are common in that

region, analogy with sympatric paired crane species of the last c.125,000 years suggests that in conditions of rapid change the Sarus Crane may be more vulnerable than the Common Crane.

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On the status of *Lybius (minor) macclounii**

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The Black-backed Barbet *Lybius minor* is variously held to include (Traylor 1963, Goodwin 1964, Benson *et al.* 1970, Goodwin & Clancey 1978) or exclude (Ripley & Heinrich 1966, Dowsett & Dowsett-Lemaire 1980), Macclounie's Barbet *Lybius (minor) macclounii*. Nominate *L. m. minor* (Cuvier) occupies Gabon, Cabinda, the lower Congo river region of Zaire and northern and northwestern Angola, and *L. minor macclounii* (Shelley) occurs from northern and eastern Angola through southern Zaire and northern Zambia to Barundi, western Tanzania and northwestern Malawi (see map 345 in Goodwin & Clancey 1978). An additional race *L. minor intercedens* (Neumann) with a type locality at Manyanga (Manianga, near the border with Congo-Brazzaville), Zaire, has been merged into *L. m. minor* (White 1965), treated

*Dedicated to the memory of C. W. Benson, whose contributions to African ornithology are legion.